ABSTRACT

A thermal decomposition apparatus for wastes comprises: a heating chamber; an inlet port; at least one pair of electrodes provided within the heating chamber; a plurality of balls each taking the shape of a sphere whose primary ingredient is carbon, provided between the at least one pair of electrodes so as to produce an electric discharge when a voltage is applied across the at least one pair of electrodes; an outlet port for discharging the gases into which the wastes are thermally decomposed ; oxygen free or vacuum environment forming means or evacuating means.

According to the present invention, an inexpensive thermal decomposition apparatus for wastes is provided which thermally decomposes almost all wastes at a high temperature of not lower than about 3000°C without producing harmful substances such as soot, dust, chlorine compounds, nitrogen compounds and/or dioxin.